

Conversation with

Joe Franklin,

AGMA
President



Q—While many readers know of AGMA, they don't know about AGMA. So, first tell us about the size and makeup of the association.

AGMA is becoming increasingly global in our activities and our membership; but, the bulk of members are small- and medium-sized U.S.-based companies. Today, we have about 400 members in all phases of the gear and mechanical power transmission business. Our corporate members are gear manufacturers, suppliers to the industry (machine tool builders, suppliers of tooling, materials, lubricants, bearings, heat treating services and such) and users of gearing. We also have individual members in two categories: academic members (who are professors of mechanical engineering) and individual consultants.

Q—What are some of the important activities in which AGMA is involved?

One of the primary reasons AGMA was founded in 1916 was to create technical standards. This important industry service continues to this day as one of the most important activities of the association. AGMA is the only organization in the U.S. that produces a full range of gear industry standards. Internationally, AGMA is the Secretariat, or administrator, of the ISO Technical Committee (60) for gear standards.

Other technical activities include a major technical conference, the Fall Technical Meeting; other technical education programs and workshops; and technical research projects, generally in conjunction with the AGMA Foundation.

On the business management side, we provide a number of activities to help managers benchmark their companies and improve their performance. These include the Operating Ratio Report, the Monthly Market Trend Report, our Wage and Benefit Survey and our Marketing Council meetings.

Networking through our technical
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committees and business management councils is an important service to our members. The opportunity to discuss issues with peers from other companies, for problem solving and for staying in touch with colleagues and friends is a valuable benefit of membership in AGMA.

AGMA works with a number of other organizations the world over to share information and advance the art and science of the industry. A few of these include other manufacturing trade associations for products such as bearings, forging, steel and heat treating; the Gear Research Institute; the National Renewable Energy Laboratory, the Society of Manufacturing Engineers, Aachen University, etc.

We offer education on how to make gears—both theoretical and hands-on—at our Training School for Gear Manufacturing in Chicago.

Q—Tell us about the gear school. How is this connected with the association, what types of courses are taught and what was the background for forming this training facility?

AGMA's Training School for Gear Manufacturing is housed at Daley College, which is one of the City Colleges of Chicago. We work closely with Daley's Career and Economic Development staff, especially with those working directly in manufacturing technology.

AGMA provides the curriculum, the instructors and acquired most of the equipment used in the hands-on workshops. This school was created in the early 1990s for the purpose of helping gear manufacturers train their new and less experienced employees in the fundamentals of gear manufacturing and inspection.

Q—Who are the instructors?

The classroom portion of the program is taught by Bob Moderow, who has many years of experience in the gear industry, and who has taught gear fundamentals for a long time. He's one of those guys who's too valuable for us to

let him retire. The other key individual is Redmond Ryan, who worked many years with Brad Foote before joining the staff at Daley College. Redmond runs the shop floor portion of the program, and he has a wealth of manufacturing knowledge. He's really the oil in the system. He's our go-to guy there. Whenever they need blanks or cutting tools, Red makes sure they have them.

Q—And what do the students get out of this experience?

Typically the students are people with only a couple of months' experience, and the gear school gives them a chance to understand—and see for themselves—how gears are made. The shop is filled with mostly older machines, which is good because the students can see the interaction between the tool and the workpiece. They get a better understanding of the physics of gear manufacturing. Then, when they go to a CNC machine and push the button, they know what's going on inside the machine.

Q—Is the gear school open to AGMA members and non-members?

Absolutely. About a third of the people who attend are not members of the AGMA.

Q—Do you have any other educational activities?

We provide customized in-plant training sessions and a new, computer-based training tool for the fundamentals of gearing and for inspection via www.agma.org. This is a new program we are just now introducing.



AGMA's Training School for Gear Manufacturing.



AGMA's Training School for Gear Manufacturing includes hands-on demonstrations of gear manufacturing techniques.

Q—Speaking of your website, how's your Internet presence going? What kind of activity are you getting?

Communicating electronically with members and others in the industry and making information available via www.agma.org is a very active aspect of AGMA and one that is continuously growing.

For example, almost all of our Technical Division communication, announcements, distribution of documents for meetings, circulation of draft standards and final ballots are done electronically.

We host webcasts on important topics, such as Dr. Michael Bradley's Economic Forecast for the Gear Industry. Even committee meetings have been held by webcast.

Using the Web for these types of activities allows far more members to participate than does a meeting where everyone has to travel. In fact, we have found that participation increases by a factor of four.

Q—You mentioned that developing standards is still one of the most important functions of the AGMA. Can you tell us about those activities?

AGMA currently has 23 technical committees working to create 22 new documents and 26 revisions of existing standards and information sheets. In total, we have 79 standards and information sheets in addition to the 22 under development. To ensure that the information is current and reflects the most current state-of-the-art, we review all AGMA standards at least once each five years. Those that need updating are then revised by the appropriate committee.

Our committees are made up of about 200 industry experts who represent the industry and their companies in this work.

Q—When you say “documents,” what does that mean?

A document could be a technical

standard or an information sheet. The information sheet requires a lower level of consensus. It may not have all the empirical data that a hard standard has. In some cases, AGMA committees will release information sheets when the technology is less well proven. In part, the information sheet is an invitation for companies to gather empirical data and test the information against experience in the field. In some cases, information sheets can evolve into technical standards. But some committees, such as the aerospace committee, typically only release information sheets.

Q—Why is it important that AGMA be represented at the ISO?

Having an active role in ISO is as much a marketing and international trade issue as it is a technical one. Like it or not, we are in a globally competitive market, and technology does not respect national boundaries. AGMA has a responsibility to make sure that our members are at the table when technological and other standards issues are decided. But beyond a defensive role, AGMA also makes sure that our members' best information and practices are included in new and revised international standards.

We do this by having experts from member companies attend the ISO meetings as delegates from AGMA and the U.S. In addition to representing the U.S. in the international standards development process, AGMA has been chosen to administer the ISO technical committee responsible for all gear-related products.

Q—What about Gear Expo? What's its history and when and where is the next one?

Gear Expo began as a tabletop display in a Chicago hotel in 1986, became a trade show with equipment in 1987, and has grown into “The Worldwide Gear Industry Event” that it is today. It has evolved into an international exhibition, distinct in the world of machin-

ery trade shows, as it is the only trade show in the world devoted exclusively to the complete gear manufacturing process. It is the one event that offers the best in technology, equipment and services for gearing industry professionals on display in one place and at one time.

The biennial show has been held in a number of Midwestern cities, such as Indianapolis, Columbus, Nashville and Detroit. Because of its proximity to the automotive industry, Detroit has been the anchor for the event every other show. The next Gear Expo will take place October 16–19, 2005, in Detroit's Cobo Center.

Q—What types of products and services are exhibited at Gear Expo?

All facets of the gearing world are on display at Gear Expo. The range of new technology, equipment and services on display runs from machine tools to forgings, lubricants, bearings and other gearing products, as well as services such as heat treating and coating. About 20% of the exhibitors are companies that manufacture gears, so users of gears can look for sources of gearing or they can look for the equipment and related products and services necessary to manufacture them.

Q—Who should attend the Gear Expo?

This event is the show to attend for gear industry executives, engineers and practitioners searching for the latest manufacturing innovations and the best in technical expertise. Professionals from around the world attend the show to solve their gearing problems—to see the leading equipment manufacturers, gear manufacturers and providers of services to the gear industry.

Q—Earlier you mentioned networking. Can you tell us about AGMA activities that encourage the members to meet, mix, make contacts and do business?



Facilitating networking is an important catalytic function of the AGMA. In fact, every meeting has an element of networking.

Over the past couple of years, we have increased the number of regional meetings and have included programs on such timely topics as gear failure analysis, gearboxes for wind turbines and gear accuracy. All have been extremely well attended by a cross section of current members as well as prospective members.

The Annual Meeting is designed for senior level managers, while the Fall Technical Meeting focuses on both the experienced technical experts in the industry and younger engineers who have the opportunity to get to know the “old timers” and learn about advances in technology and process advances. Standalone seminars such as the Gear Failure Analysis seminar are held twice each year.

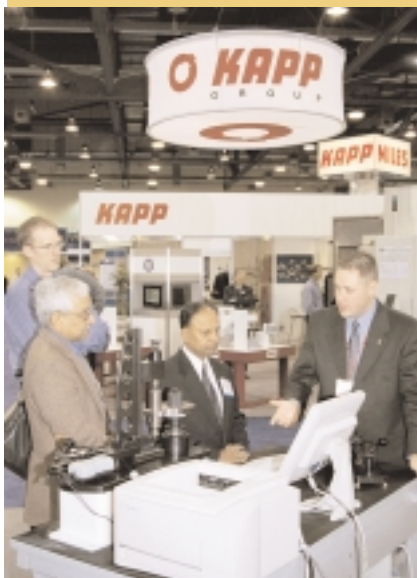


AGMA is one of the key participants of the World Gear Summit (top two photos), and the association also hosts an annual Fall Technical Meeting (bottom two photos).



AGMA Strategic Objectives:

- Continue AGMA's leadership role in the development of domestic and international technical standards.
- Help members compete/benefit in global growth.
- Stimulate interest in careers in gears and gear/coupling-related products.
- Provide for the long-term viability of the AGMA membership through leadership development.
- Communicate important industry information in the most effective/efficient manner to get the desired positive response.
- Provide value to the organization and to meet and grow revenue through membership growth and retention.



AGMA's Gear Expo.

Q—What activities are going on within the Association to incorporate some new gear materials and manufacturing processes, such as plastics and powder metal?

It is imperative that AGMA recognize the trend toward alternative materials for gearing applications.

Several years ago, we created an Emerging Technologies Council that evolved into two distinct groups: one for companies that manufacture or supply plastic gearing and its analog for powder metal gears. These groups are developing technical standards, have held technical workshops, and have participated in technical conferences organized by other groups. As this is a newer activity, it is growing and defining itself as it grows. We are also looking at similar groups for specific products, such as precision gear heads.

Q—Why should a member volunteer to work on one of the association's standards committees?

Members of AGMA can participate on any of our technical committees for which the primary objective is the creation and maintenance of technical standards. Many companies assign key employees to participate as a way for them to stay aware of the latest developments in the industry and to make sure that technical provisions important to their competitive position are represented.

Less formally, many of the industry's leading engineers tell me that—following school—this is really where they learned about gearing. Participants have the opportunity to sit at the table with the industry's top experts in every field of gearing.

It may not be obvious to those who do not participate, but those companies and individuals who develop a standard are the ones who know it best. You will find that the companies that are recognized as the industry's competitive and technological leaders always have a staff person at these meetings.

Finally, even our domestic or AGMA standard activities include participants from our international members. Several people travel several times each year to the U.S. to participate in committee meetings. Other members receive the minutes and committee documents by e-mail and participate electronically.

Q—Looking at the bigger picture, why should a company join AGMA?

AGMA offers a large number and variety of programs and activities, but members tell me that they join and continue in the association not for discounts or specific programs. Rather, they are here for three broad reasons I have categorized as access, credibility and voice.

Q—OK. Tell us about access.

You asked earlier about networking; well, that's a lot of what access is about. Members have very easy access to most other members to help solve problems, recognize best practices and advance their company's objectives. When you look closely at our membership, more of our members do not compete with each other than do.

Members also have access to information not commonly available to non-members through the several programs open only to members. We find that members tend to form bonds and become life-time friends with other members.

It is a good way to have friends who understand what you face every day. At one of our recent regional meetings, one of the participants said that the best part of AGMA meetings was being in a room full of people who understood what he was saying when he used industry jargon.

Q—What about credibility?

Credibility is shorthand for the benefits that come to those companies that openly state they are part of this industry. AGMA membership is such a statement. A few times each year, I get a frantic call from someone who "must" join AGMA immediately because a contrac-

tor requires AGMA membership as part of a contract. (What the contractor is relying on is the presumption that AGMA members are better quality manufacturers than non-members.) Members benefit from the halo effect that being associated with the best and the most competitive manufacturers in the world enjoy.

Q—And voice?

Voice is the third reason. It means that AGMA is member-driven. Our board enacts policies and programs that the members want, and our staff implements them. A number of our current programs—such as the Training School for Gear Manufacturing in Chicago—are direct results of the actions of a few involved members.

Q—There are associations in other countries that focus on gear manufacturing. How are they different from AGMA?

AGMA is quite active with the associations in Europe and Asia. In fact, we regularly meet with a federation of the European gearing associations known as EUROTRANS. We share economic and technical information so that we all have a better understanding of the structure of the international marketplace.

In the early '90s, AGMA was the driver behind creating the World Gear Summit, in which gear industry representatives and associations from the key producing countries could get together to expand their understanding of each other and each other's markets and manufacturers. Over time, we have expanded the group and will meet next in the spring of 2005 at the Hannover Fair.

In terms of how we are the same and different, all of the associations work for the interest of their members. I think AGMA benefits because, at any meeting, AGMA members literally sit with each delegation. We have members in over 30 countries, so this international interchange is a natural and necessary part of our future.

Q—What do you see as the future of gear manufacturing in the United States?

For competitive manufacturers, the future is bright. Of course, we face inevitable changes in the economic structure, as we have since the beginning of our country and our association.

As the manufacturing process continues to be driven by capital equipment and less by the old-time artisans and craftsmen, manufacturers here will do well. Increasingly, supply-chain concerns will insulate good manufacturers from low-wage competitors.

Q—Aren't some companies in low-wage parts of the world investing as much, or more, in new, productive equipment? How can American manufacturers compete?

Recently, I had a very intriguing conversation with a large manufacturer working with a partner in China. This manufacturer had gotten some gear business by quoting "Chinese Prices." After they acquired the business, the Chinese partner went out and bought the equipment required to produce the gears. About \$120 million later, they came back and asked for a price increase. They found out that they just couldn't produce the gears the customer wanted at "Chinese Prices."

Q—So where does this leave the American gear manufacturer?

I think we're going to see increasingly as we get past the low-wage stage that the prices are going to come out closer. They may never be equal, but they're going to get closer.

Q—What can American gear manufacturers do to learn more about markets like China?

We're organizing a trade mission to China in October, focused on the PTC Asia 2004 power transmission trade show in Shanghai. I think we'll be able to provide a very successful and pretty

accurate view of the Chinese market. Our objective is to give people a better understanding of the requirements to setting up an operation in or selling into that market.

Q—What would you like the association to accomplish in the next five years?

The key is you have to stay fresh, and you have to stay in tune with your market. Somebody recently asked me if I thought that many gear manufacturing operations were modern, and I just about fell out of my chair. Anybody who is successful in manufacturing today is modern. The pressures on manufacturers require them to continually innovate.

The same is true of the AGMA. When we sat down recently to work on our next strategic objectives, there were two overriding themes. The first was that we need to work harder to ensure that we are broadcasting an energetic, enthusiastic, dynamic and vibrant image for the gear industry.

The second is making sure that we open the organization up to the next level of industry leaders. You see people in the industry who've been involved with the association for 20, 25, 30 or more years. Those people won't be there forever. But there are many young men and women actively involved in leadership roles at their companies who should be more involved with the association. We're going to be making a special effort to reach out to these young executives and managers. ⚙

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